

ONE MINUTE FOR THE MONKEY:

A very brief Survey Monkey poll, to help us be more scientific about communication!

Please click the link to tell us how the GCPO is doing:

<http://www.surveymonkey.com/s/DZGNRMH>

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The GCPO Monitor



Message from the Chairman, Mark Musaus

Welcome to the inaugural issue of the GCPO Monitor! The Gulf Coastal Plains & Ozarks LCC is up and running, has some talented staff working full time, and partners working together on identifying science needs across the GCPO landscape. My hope is that the information in this newsletter will encourage organizations, agencies, and researchers to sit up, take notice, and get further involved by digging deep into the information on our recently [redesigned website](#) or contacting Greg Wathen, John Tirpak or me (email addresses available at [Members](#)).

As the newly elected chair of the Interim Steering Committee, I'd like to thank my colleagues for their vote of confidence, but point out that my position as chair is one that will be revisited once the steering committee is fully composed.

When will the steering committee be fully composed? When its membership truly reflects the diversity of taxa, expertise and cultures present in our geography. We have identified a number of agencies with whom we definitely intend to partner, among them the Environmental Protection Agency and the National Park Service. We have also identified a critical need to ensure organizations and experts focused on aquatic resources bring their talents to the table.

At the June, 2011 meeting of the Interim Steering Committee, many ambitious new initiatives, summarized in this September 2011 newsletter, were discussed and approved. We thanked the Lower Mississippi Valley Joint Venture staff and management board for the critical role they played in helping to establish the cooperative framework of the GCPO LCC. We also acknowledged that the time has come for this LCC to move beyond all four of the Joint Ventures that currently partner with us, so that we may fully achieve our Landscape Conservation vision: science partnerships in support of socially viable solutions that will sustain native fish and wildlife and the ecological functions that support them.



THE MEANDER: Profiling one of “us” - the many people and organizations that make up the far-flung Gulf Coastal Plains and Ozarks LCC

Mississippi State University: Geosystems Research Institute and the Northern Gulf Institute

Mississippi State University's Geosystems Research Institute [<http://www.gri.msstate.edu/>] has been among the first partners within the GCPO LCC. The LCC “diaspora” welcomes one of the most low-profile yet exciting research facilities east of the Mississippi!

The Geosystems Research Institute or GRI applies advanced scientific imaging and spatial detection technologies to develop new, innovative, and best of all, cost-effective ways to address a wide variety of natural

resource management problems. A sampling includes:

- hyperspectral imaging to increase agricultural outputs and profits while reducing pesticide use
- advanced satellite imagery and remote sensing to assess the condition of Gulf of Mexico marshlands and river levees
- modeling and spatial tools applied in coordination with the Dept. of Homeland Security to decrease the risk of agricultural terrorism and strengthen debris management in the wake of disasters such as floods and storms
- modeling and visual analytics software to better predict flood risk and promote improved navigation
- genetic data, ecological habitat models, and even good old-fashioned volunteer observations to monitor and model the source of new invasive cactus moths

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That's why I'm excited. One reason that the LCC is such an incredibly strong concept is that it grew out of the success of Joint Ventures in support of waterfowl, at first, then later landbirds and now all birds. But a Southern landscape without mammals, fish, invertebrates, and forests is no landscape at all.

Let's be honest: the fact that LCCs in many parts of the country grew out of JVs has caused some organizational confusion at times. But let's be clear about the concept: non-regulatory partnerships with mutual goals and willingness to collaborate will drive the success of the Landscape Conservation Cooperatives, just as they have been key to the phenomenal success of Joint Ventures. We are now fishing for a few good men, women and organizations to expand the scope of the GCPO LCC; if you fit that description, please get in touch. If you know others who would be interested, please feel free to forward this newsletter - noting that they will need to [join the network](#) to access the full-length articles.

--Mark Musaus, USFWS

- geospatial tools to optimize “precision conservation,” which seeks to deploy Farm Bill program support and fertilizers in a way that identifies soils underutilized for production and marginal areas appropriate for conservation.

Established in 2002, as a merger of four entities within Mississippi State University, the GRI’s mission is to “better understand and predict Earth’s systems and develop geospatial technologies that promote their stewardship, sustainability, and contributions to prosperity.”

Enthusiasm for the LCC

Robert Moorhead is director of GRI and a researcher in computational and applied visualization. He explained why the folks at GRI are excited enough about the Landscape Conservation Cooperative to dedicate a position, the Assistant Research Professor of Geomatics, to LCC research. This new position is expected to commence in October, developing mobile research and monitoring applications for land and water managers in the field. In addition, Charles O’Hara of the GRI is already helping to develop a GCPO landcover database.

“The Landscape Conservation Cooperative presents the opportunity to bring a lot of assets and interested parties together, working toward a common focus,” Moorhead said. “To use engineering terms, the LCC will help us to be more efficient and synergistic about

our work - and I’m using the terms ‘we’ and ‘our’ in a collective sense.

“What I mean by efficiency is that when you do conservation, you have to balance that work with economic demand. It’s easy for people to get at cross purposes unintentionally. I see the LCC as being a coordinating and cooperative force in helping us all manage our natural resources. The LCC may help to reduce redundancies in efforts among different institutions, but even more than that, I see the LCC steering research and management efforts, as much as getting our individual institutions to say, ‘if you do that, we don’t have to . . .’”

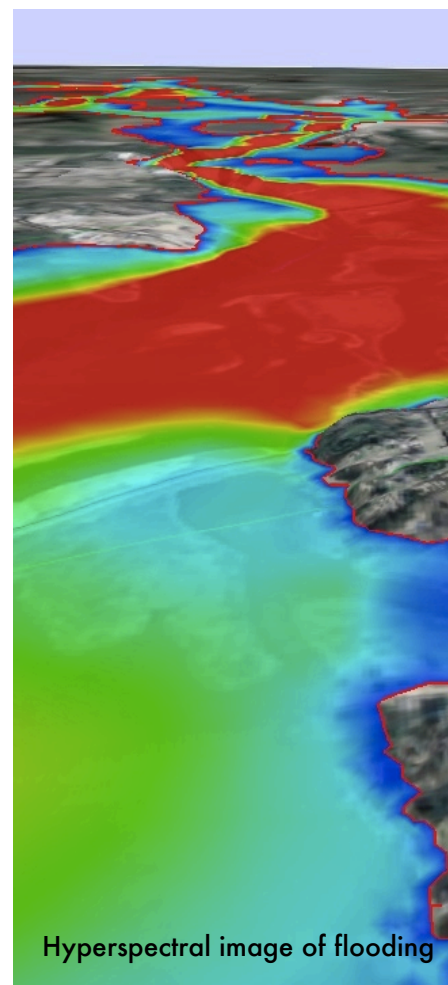
“Together, we can all do more for the same amount of funding by focusing our efforts. Everybody has their mission, but by pooling resources and working collaboratively, all of the LCC organizations will gain more than if any of us were relying solely on what we can do alone.”

Blurring the Lines

But the GRI is not where Mississippi State University’s involvement in the LCC ends. The Northern Gulf Institute, or NGI, is a NOAA cooperative institute which was developed through research done by the GRI. The NGI “develops, operates, and maintains an increasingly integrated research program focused on filling priority gaps and reducing limitations in current Northern Gulf of Mexico awareness, understanding and decision support.” Of particular

use to many Gulf organizations will be their spatial data and information tools. [<http://www.northerngulfinstitute.org/mapping/onlineMapping.php>].

Moorhead explained that “our partnership with the LCC started out with GRI, but now it looks like the Northern Gulf Institute will be involved too. The NGI is not officially a partner yet, but we could be. Our NOAA liaison, Laurie Rounds, has already been designated as a Gulf Coast-NOAA liaison to all four of the Gulf Coast Landscape Conservation Cooperatives - bridging and blurring the lines between them. I feel certain that the NGI will be part of the resources that NOAA brings to the LCC table.”



A WIDE-ANGLE VIEW: a wide-angle perspective from the GCPO LCC Coordinator, Greg Wathen

It's been nearly nine months since I started the job of Coordinator for the GCPO LCC, and it's certainly been an interesting ride thus far. Lots of travels, meeting lots of new folks, and figuring out what the heck it is that a LCC is supposed to be doing. If anything, along the way there have been plenty of questions on that: What is an LCC, and what are they supposed to be doing? How can I get involved in the LCC? What is my role in an LCC?

Fair enough, so there are lots of questions, and perhaps not all that many answers yet. As one of my esteemed colleagues (who shall remain nameless) commented a few months ago, LCCs seem to be "like fish flopping out of water" - it was an accurate statement at the time, but I think we're starting to turn the corner and beginning to find our stride. Evidence for that comes from the dedicated LCC staff additions that we have been able to make in the last few months, and the opportunities that are arising in working with new partners in the Gulf of Mexico. These partners have been active in conservation for many years now, but this hasn't been a group that I have had an opportunity to work with before. I'm hoping that with this newsletter, and with other communications outreach that we'll be doing in the coming months, we'll start to answer

some of those questions in a better and more effective way.

Since the GCPO LCC Steering Committee meeting in June, we've been busy working on several of the action items that were approved. Chuck O'Hara, with Geosystems Research Institute at Mississippi State University, is working to move the landcover data update project forward, and Mississippi State is in the process of hiring a geospatial analyst that will really improve the LCC's GIS capacity. Dr. Mike Osland is settling in to his new environment in Lafayette, LA, at the USGS National Wetland Research Center, and John Tirpak will be joining him there soon. As John completes his move to Lafayette, this will help to solidify the Science office of the LCC. We've hired Gregg Elliott, who will be working to develop the LCC Communications Strategy, and will also be coordinating much of the LCC's communications outreach efforts. And we've been working with NOAA and the three other LCCs with Gulf Coast responsibilities to establish a NOAA-LCC Liaison position. We are expecting the liaison to help us make important connections with the coastal and marine conservation community of the Gulf Coast. There are truly some exciting developments evolving within the GCPO LCC.

THE CENSUS (a little box of statistics)

There is strength in numbers, and the GCPO LCC is growing!

- GCPO LCC member organizations and units: 161 & counting
- GCPO LCC steering committee partners: 24
- GCPO LCC staff (full or part-time as of Sep 2011): 6
- States included in the GCPO: 12 (AR, MS, AL, FL, GA, TN, KY, IL, MO, OK, TX, LA)
- Number of acres within the GCPO LCC: 180 million

In mid-August, John Tirpak (GCPO LCC Science Coordinator) and I attended a Climate Change Vulnerability Assessment Workshop, which was designed to teach the nuts and bolts of conducting a vulnerability assessments. Vulnerability assessments use scientific data and modeling to identify those species and systems most likely to be in need of conservation actions as a result of climate change. They're the first step toward building an adaptation strategy.

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The workshop was attended by about 53 people, from all over the country, and representing a number of federal agencies, states, and some NGO's. The training workshop was important for several reasons, but for me personally, more than anything else I learned that there are a great number of technological tools and a lot of information available right now that should help the GCPO LCC begin to tackle vulnerability assessments in a meaningful and effective way. Vulnerability assessments are an important priority for the GCPO LCC, so we'll be laying out a game plan to our Steering Committee in October at their meeting in Nashville on how to work through the process over the next couple of years. As part of that game plan, we'll be relying on an Adaptation Science Management Team to help guide us. If you're interested in learning more about the Climate Change Vulnerability Assessment Workshop, and other climate change training opportunities, go to http://training.fws.gov/CSP/Resources/climate_change/home.html. Also, consider joining Geomatics or one of the other LCC Working Groups to contribute to this effort.

So: What is an LCC, and what are they supposed to be doing? How can I get involved in the LCC? What is my role in an LCC? Perhaps the better question is

"what is my role in a Cooperative whose mission is to 'to articulate the shared vision for sustainable natural and cultural resources in the Gulf Coastal Plains and Ozarks geography in the face of a changing climate and other threats'?"

When I think of the question from that perspective, it becomes clear to me that each of us, as individuals, as a member of our own organization, and as a member of the Cooperative, play an absolutely critical role in defining a landscape capable of sustaining fish and wildlife resources in the GCPO geography. This Cooperative, as embodied by the multitude of individuals and organizations with a conservation mission, that is, the conservation community, has an incredible opportunity to set the standard for conservation in the 21st century. There is no doubt that the challenges of our time are huge, but the opportunities for success are before us as well, especially if we in the conservation community can come together to show the way.

I hope that you will join me in making the GCPO LCC a model of conservation for the country.

The Tidal Exchange: Project Updates & News

A Sampling of GCPO LCC Projects:

Geomatics - consistent landcover database and land use

change detection. The GCPO LCC has established a Geomatics Working Group, which will undertake the development of a LCC-wide landcover database, based on a consistent classification system. Once this database is established, a priority will be to develop a systematic change detection process, to allow for more timely and frequent updates to land use classification for the GCPO LCC geography. The Geomatics Working Group has also established a longer-term objective of establishing a Conservation Planning Atlas GIS portal, which would provide the GCPO LCC Conservation Community with a single portal of access to geospatial conservation planning data within the GCPO LCC. This project is expected to be part of a southeastern region-wide project.

Vulnerability Assessments - the GCPO LCC is establishing an Adaptation Science Management Team, with a primary responsibility of identifying priority species and ecosystems within the GCPO geography that should be assessed for vulnerability to climate change and other environmental and regional stressors.

Future Scenario Modeling- as part of its Southeast Regional Assessment Project (SERAP), the SE Climate Science Center is integrating models of urbanization and vegetation dynamics with regional climate models to assess how landscape



(Projects, continued from previous page)

change could impact priority species.

Inventory and Monitoring - the GCPO LCC is partnering with the USFWS SE Region Inventory & Monitoring Program, to identify and facilitate the establishment of priority inventory and monitoring projects on National Wildlife Refuges (NWRs) within the GCPO geography. Examples of selected projects include LiDAR analyses on several NWRs, Weather Severity Index impacts on wintering waterfowl, and bat monitoring on NWRs.

Communications and Outreach Strategy - the GCPO LCC is developing a Communications and Outreach strategy to facilitate both coordination and collaboration among partners as well as outreach to and education of a larger conservation constituency within the GCPO geography. The strategy will be developed and implemented by a LCC communications working group.

Who are the GCPO Conservation Science Staff?

Current Staff:

Greg Wathen, Coordinator – Tennessee Wildlife Resources Agency

Dr. John Tirpak, Science Coordinator – US Fish & Wildlife Service

Dr. Mike Osland, Wetland Ecologist – US Geological Survey, National Wetland Research Center

Karen “Gregg” Elliott, Communications/Outreach Specialist - K Gregg Consulting

Laurie Rounds, Gulf Coast NOAA-LCC Liaison – National Oceanic and Atmospheric Administration; (this is a shared position, across 4 LCCs with Gulf Coast responsibilities)

Planned Staffing Additions:

Assistant Research Professor, Geomatics – Mississippi State University (anticipated to start October 1, 2011)

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